**Scales and Strategies for N2-N3-N4 (thought piece for discussion)**

SCALES – *DO WE HAVE COMMON UNDERSTANDING AND ARE WE ADDRESSING THE RIGHT ONES WITH OUR METHODS?*

Primary scale of interest to N2 is the landscape as defined in the proposal:

“A combined physical and social unit large enough to encompass the range of land uses on which local communities depend, either directly for provisioning ecosystem services (food, fiber, livestock, trees) or regulating services (watershed functions), and a range of social institutions which are directly responsible for resource management.”

For this project we have chosen the Woreda to represent this landscape scale. Defined by a political boundary, it represents a meso-scale (biophysically between small watersheds and Basin, and socially/decision making between community and state).

This meso/landscape scale is a key innovative feature of the research projects.

In addition to capacity building, engaging in policy and research networks etc:

N2 is responsible to:

*(note this is in the very simplest terms)*

1.Define RMStrategies for intervention that are relevant to the landscape (Woreda) - and provide guidance on identifying RMS

Measure the impacts of these strategies on:

a. Livelihoods (& equity)

b. WP (SYSTEM WP crops, livestock, trees) AT LANDSCAPE SCALE

c. Environment

(This to be done based on existing interventions more than implementing new infrastructure or other interventions, and scenarios, micro watershed used for primary hydrology data to support b, and hydrologic modeling improvement at larger scales too)

2. Analyze policy and institutional environment that contribute to or constrain success of RMStrategies

a. formal and informal institutions

b. planning, implementation and adoption actors AT LANDSCAPE

c. process of change and policy options (and maybe larger)

3. Strategies for Ethiopia Blue Nile and Scenarios AT LANDSCAPE SCALE

N3 is responsible targeting and extrapolation (investment advice):

*(note this is in the very most simple terms)*

To be achieved through:

1. Similarity analysis of various units, mostly Woreda

2. Matching Strategies (from N2) to map-able indicies BLUE NILE

3. Mapping possible scaling out potentials

N4 is responsible to:

*(note this is in the very most simple terms)*

1. Predict impact of widescale adoption of strategies on:

a. Flows of water and sediment

b. Productivity and WP BLUE NILE

c. Poverty/livelihoods

d. Institutional consequences

2. Provide best lands use practices (productivity, WP, livelihood, economics) at BLUE NILE SCALE??

3. Water savings (Green /Blue SEI)

Ideally project dependencies are something like:

N2 Strategies are basis for N3 and N4 for mapping and impact assessment

N2 landscape impacts on WP livelihoods and environment used to ‘ground truth’ validate or somehow confirm or make more accurate N3 and N4 mapping and impact assessment (this must be post field work, so not before 3 and 4 develop methods/models…

N3 can confirm/demonstrate what is represented by N2 study sites in overall basin context

Scenarios used by any (N2, N3, N4, N5) are consistent with others at least in a way that is easily communicated

RMS – *WHAT ARE WE TALKING ABOUT?*

As a starting point for discussion the following concept is proposed for defining strategies in a way that is useful to all three projects.

Strategies would define main goal with attention to possibilities for measurable change (through scenarios) in e.g. water, ecosystem services, tree cover, or livelihoods that is scalable (mapable).

Strategies should be specific to each N2 case study with attention to differences in state of development, ecosystem factors, actors, and promising entry points/opportunities.

Strategies would be achieved through ‘interventions’ that would be both biophysical or social, sometimes mainly social….

*Example*

Strategy:

Increase overall water retention and productive use in the landscape.

Or more detailed:

Increase tree cover overall, implement other soil water conservation measures to reduce land degradation in highlands, and increase water control in midlands and lowlands to stabilize and increase overall productivity and buffer against dry spells and climate variability.

Interventions:

Biophysical

Ag water management interventions – small scale irrigation; groundwater development; rainwater harvesting; soil water management

Soil conservation measures: reforestation, gully rehabilitation

Agroforestry, multipurpose trees and fruit trees

Grazing pressure management

Livestock fodder improvement

Change in agricultural production systems

Social / economic *(these may have a lot to do with our outcome logic…)*

Increase capacity of communities for collective action

Increase capacity of planners to use improved integration tools (by sector and landscape niche)

Increase access to markets

economic instruments (PES)